

$^{13}\text{C}(\text{d},\text{t})$ [1979Co08](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, J. E. Purcell and C. G. Sheu		NP A968, 71 (2017)	1-Jan-2017

- 1968Te04: $^{13}\text{C}(\text{d},\text{t})$ $E=12.1\text{-}14.0$ MeV, measured $\sigma(E, E_t, \theta)$. ^{12}C deduced S.
- 1971De03: $^{13}\text{C}(\text{pol. d,t})$ $E_d=12.1$ MeV, measured vector analyzing power $P_d(\theta)$.
- 1971Pu01: $^{13}\text{C}(\text{d},\text{t})$ $E=0.4\text{-}0.85$ MeV, measured $\sigma(E, \theta)$. Deduced optical-model parameters.
- 1972Br27: $^{13}\text{C}(\text{d},\text{t})$ $E=28$ MeV, measured $\sigma(E_{d'}), \sigma(\theta)$. ^{12}C levels deduced isospin mixing, S, β .
- 1973Za06: $^{13}\text{C}(\text{d},\text{t})$ $E=13.6$ MeV, measured $\sigma(E_t, \theta)$.
- 1974Lu06: $^{13}\text{C}(\text{pol. d,t})$ $E=15$ MeV, measured $\sigma(E_t, \theta), A(\theta)$. ^{12}C level deduced S, J-dependence, J-admixtures. DWBA analysis.
- 1975Za06: $^{13}\text{C}(\text{d},\text{t})$, analyzed data. Deduced J dependence of σ .
- 1977Li02: $^{13}\text{C}(\text{d},\text{t})$ $E=24\text{-}26$ MeV, measured $\sigma(\theta)$. ^{12}C levels deduced S. DWBA analysis.
- 1978Da17: $^{13}\text{C}(\text{pol. d,t})$ $E=13.0$ MeV, measured vector analyzing power $iT_{11}(\theta), \sigma(\theta)$. Deduced optical model parameters. DWBA analysis.
- 1979Co08: $^{13}\text{C}(\text{d},\text{t})$ $E=29$ MeV, measured $\sigma(\theta), Ay(\theta)$. ^{12}C levels deduced isospin mixing. DWBA calculations.
- 1988Go02: $^{13}\text{C}(\text{d},\text{t})$ $E=18$ MeV, measured $\sigma(\theta)$. Deduced model parameters, spectroscopic factors. Exact, finite-range DWBA.
- 1988Gu20: $^{13}\text{C}(\text{d},\text{t})$ $E=18$ MeV, measured $\sigma(\theta)$. DWBA.
- 1990Gu26: $^{13}\text{C}(\text{d},\text{t})$ $E=18$ MeV, analyzed $\sigma(\theta)$. Deduced reaction mechanism, differences. DWBA analysis.
- 1995Gu22: $^{13}\text{C}(\text{d},\text{t})$ $E=8\text{-}50$ MeV, analyzed $\sigma(\theta)$. Deduced vertex constants. Combined DWBA, dispersion theory approaches.
- 2007Co01: $^{13}\text{C}(\text{d},\text{t})$ $E=0.5\text{-}1.65$ MeV, measured $\sigma(\theta)$.

 ^{12}C Levels

E(level)
0
4.4×10^3
7.65×10^3
12.71×10^3 [†]
15.11×10^3 [†]
16.11×10^3 [†]

[†] See ([1972Br27](#), [1977Li02](#), [1979Co08](#)) for measurements of $^{12}\text{C}^*(12.7, 15.1, 16.1$ MeV) and studies of the charge-dependent matrix element between $^{12}\text{C}^*(12.71, 15.11)$.